

Careproctus georgianus, Lönnberg, = *Careproctus georgianus*.

The posterior nostril appears to be absent in this species. Undoubtedly the species has been correctly placed by Lönnberg.

Liparis antarctica falklandica, Lönnberg,
= *Careproctus falklandica*.

The single nostril and the coloration indicate that this species belongs with *Careproctus*.

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LV.—*On Insectivores and Rodents collected by Mr. F. Kingdon Ward in N.W. Yunnan.* By OLDFIELD THOMAS.

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AFTER the finish of Mr. Malcolm Anderson's collecting work in Western Sze-chwan for the Duke of Bedford's Expedition, his two companions Dr. J. A. C. Smith and Mr. F. Kingdon

Ward each did some collecting on their own account in different parts of China. The former sent home from Kan-su the new rodents I described in the 'Annals' for last December, while the latter made in the far north-west of Yunnan the present collection, which has been acquired for the British Museum by the kind help of the Duke of Bedford.

Although owing to his other avocations Mr. Ward was not able to send any large series of mammals, the collection contains several novelties, both, as usual in this region, some new voles and also a representative of the remarkable Insectivorous genus *Scaptonyx*, which Mr. Anderson had never obtained, and which is a genus new to the Museum collection.

Altogether Mr. Ward's collection is of great interest, and shows how much more remains to be done in that rich mountainous area of Western China.

With the exception of the type of *Microtus wardi* all the specimens were obtained at or near A-tun-tsi, a place some 200 miles S.W. of Ta-t sien-lu, in the drainage-area of the Upper Me-Kong.

1. *Scaptonyx fusicaudatus affinis*, subsp. n.

♂. 19. 12 miles S.E. of A-tun-tsi. 13,500'. 22nd June, 1911. B.M. no. 12. 3. 18. 1. *Type*.

General characters of *fusicaudatus*, but upper canine larger, premolars smaller— p^3 not larger than i^2 , p^1 and p^2 subequal, smaller than p^3 , p^4 slightly shorter horizontally than in *fusicaudatus*, but of about the same breadth. Below, the whole tooth-row is shorter, the incisors less spatulate, the canine (the third tooth in the jaw) shorter than the posterior incisor and more slender. P_1 (the large caniniform tooth) and p_4 nearly equal in size, though rather lighter than in *fusicaudatus*, but p_2 and p_3 conspicuously smaller than in that animal; p_3 not a quarter the bulk and about half the height of p_4 , p_2 again about half its bulk and three-fourths its height, both teeth single-rooted.

As Milne-Edwards supposed, zygomatic arches are present, though very slender.

Dimensions of the type (measured in the flesh):—

Head and body 90 mm.; tail 31; hind foot 15.5; ear 3.5.

Skull: greatest length 24.3; basal length 20.2; greatest breadth 10.7; zygomatic breadth 8.6; intertemporal breadth 5.4; palatal length 11; breadth outside molars 6.8; upper tooth-series 10.5; lower tooth-series 9.2; horizontal length of p^3 0.5, p_1 0.7, p_2 0.3, p_3 0.5, p_4 1.0.

Type as above.

"Caught on mossy bank in *Abies* forest."—F. K. W.

The nose of this specimen is elongate, approximating to that of *Uropsilus*, and there is no doubt the short-nosed condition described and figured by Milne-Edwards was due to the vicissitudes his specimen had undergone.

This is the first example of the distinct genus *Scaptonyx* that has come to the British Museum, David's specimen in the Paris Museum having remained unique up to the present time. Thanks to the courtesy of Prof. Trouessart I have had an opportunity to compare the skulls of the two, and find such differences in the proportions of the premolars as to indicate that the Me-Kong form is subspecifically distinct. All other characters would seem to be the same.

With regard to the dentition of *Scaptonyx*, it is evident that in one respect at least the formula given by Milne-Edwards is erroneous, for while correctly identifying the upper canine, he has not noticed that the long caniniform tooth of the lower jaw bites behind instead of in front of it, and is therefore—as in the true moles—the first premolar.

Putting the formula, therefore, in the same manner as those of the other members of the group recently published*, we should have:—

$$I. \frac{1.2.3}{0.2.3}, C. \frac{1}{1}, P. \frac{1.2.3.4}{1.2.3.4}, M. \frac{1.2.3}{1.2.3} = \frac{11}{10} \times 2 = 42.$$

The number of teeth is the same as in *Mogera*, there being one less lower incisor than in *Talpa*. Whether the missing incisor is i_1 or i_3 remains to be proved, both for *Scaptonyx* and *Mogera*, but the indications of the milk-dentition seem to show that in *Dymecodon* and *Urotrichus* at least it is i_1 , as formulated above.

So far as its dentition is concerned, *Scaptonyx* is in an interesting halfway condition between the *Talpa* group, in which the canine above and caniniform premolar below are dominant, the incisors being small, and *Urotrichus* and the American moles, in which the main work is thrown on the anterior incisors, both above and below. Here there is apparently little difference in functional importance between the competing teeth.

2. *Marmota robusta*, M.-Edw.

♀. 20 (young). A-tun-tsi. 15,000'.

* P. Z. S. 1912, p. 131.

3. *Epimys confucianus*, M.-Edw.

♀ . 3. A-tun-tsi. 11,500'.

4. *Apodemus speciosus latronum*, Thos.

♂ . 4, 8, 13, 15, 23 ; ♀ . 12, 14. A-tun-tsi. 12,000'.

5. *Apodemus chevrieri*, M.-Edw.

♀ . 24, 27. A-tun-tsi. 12,000'.

6. *Microtus irene*, Thos.

♀ . 9, 22. A-tun-tsi, N.W. Yunnan. 14,000-16,000'.

♂ . 26. Mo-ting, N.W. Yunnan. 15,000'.

7. *Microtus (Anteliomys) wardi*, sp. n.♂ . 18 (skull only). Chamutong, Upper Salween drainage-area, W. of A-tun-tsi. 13,000'. B.M. no. 12. 3. 18. 15.
*Type.*Skull smaller, flatter, and with much smaller bullæ than in *M. (A.) chinensis*.Size rather less than in the only previously known species of this subgenus, *M. (A.) chinensis*, Thos. Skull with comparatively small brain-case, its upper outline less convex, its height considerably less, owing both to the smaller bullæ and lower brain-case. Palatal foramina narrow throughout, scarcely broader mesially. Posterior edge of palate as in *chinensis*. Bullæ conspicuously smaller in all dimensions.Incisors unusually long in the type, their outer corners produced into two long points. Molars essentially as in true *chinensis*: m^1 with spaces 2+3 and 4+5 communicating respectively with each other; m^2 with spaces 2+3 open; m^3 with all the spaces communicating, the outline of the tooth as in typical *chinensis*, its inner side with five well-marked angles.

Dimensions of the type (the flesh-measurements recorded on the skull-label):—

Head and body 119 mm.; tail 57; hind foot 19; ear 14.

Skull: condylo-incisive length 27.3; basilar length 24; zygomatic breadth 15.7; nasals 8.2 × 3.4; interorbital breadth 4.2; combined height of brain-case and bullæ 9; diastoma 8.5; palatal foramina 8.5; upper molar series (crowns) 6.3.

Hab. & Type as above.

This fine vole, which I have named in honour of its discoverer, is readily distinguishable from its only previously described ally *M. (A.) chinensis* by its lower skull and much smaller bullæ. Mr. Ward says that it is common at Chamutong, and it was merely by an accident that he only brought home the single skull now described.

In working out this species I have had occasion to study the specimens hitherto referred by me to *M. (A.) chinensis*, 17 in number, 8 from the neighbourhood of Ta-t sien-lu and 9 from Omi-san and Kiating-fu, the latter being the type locality.

The two sets agree closely with each other in all respects except certain details of tooth-pattern, in which there is such an average difference that I think the two should be distinguished subspecifically. The new form may be called

Microtus (Antelionmys) chinensis tarquinius, subsp. n.

M^3 with only four salient angles on its inner side (in 7 out of 8 specimens), *chinensis* having 5 (in 8 out of 9 specimens). Spaces of teeth generally tending to be less frequently open to each other, the two following pairs of spaces being taken as samples: spaces 2+3 of m^1 closed in 5 out of 8 specimens, open in all 9 of *chinensis*; spaces 3+4 of m^3 closed in 6 out of 8, open in 7 out of 9 in *chinensis*. Front part of m^3 less like that of an *Alticola*, the spaces 1+2 narrowly open or closed in 6 out of 7 specimens, broadly open and *Alticola*-like in 8 out of 9 *chinensis*.

Dimensions of the type:—

Head and body 108 mm.; tail 68; hind foot 21; ear 15.

Skull: occipito-nasal length 28.7; condylo-incisive length 27.5; zygomatic breadth 16.1; upper molar series (crowns) 6.2.

Hab. (of type). 23 miles S.E. of Ta-t sien-lu, W. Szechwan. Alt. 10,000'.

Type. Adult male. B.M. no. 11. 2. 1. 207. Original number 2328. Collected 15th June, 1910, by M. P. Anderson. Presented by the Duke of Bedford.

8. *Microtus (Antelionmys) custos*, sp. n.

♂. 2, 6, 7, 11, 21; ♀. 1, 10, 16, 17. A-tun-tsi, N.W. Yunnan. 11,500–12,500'.

A brown vole looking like a *Caryomys*, but with teeth as in *Antelionmys*.

General appearance very much as in *M. (Caryomys) nux*.

Fur long and soft; hairs of back about 11 mm. in length. General colour above rather warmer than "broccoli brown"; head more greyish brown. Under surface paler brown, the hairs of the belly washed with wood-brown, but those of the throat, chest, and axillæ with greyish tips. Ears short, brown, little prominent. Hands and feet greyish white above; hind foot-pads 6. Tail short, dark brown above, greyish below. Mammæ 0—2=4.

Skull with the characteristic shape found in the three subgenera, *Eothenomys*, *Antelionomys*, and *Caryomys*, the upper surface smooth, rounded, without marked ridges, the inter-orbital region broad, short, its edges rounded and its middle line flat or concave, without tendency to form a median crest. Palatal foramina somewhat dilated in their anterior third. Bullæ rather small, slightly larger proportionally than in *M. wardi*.

Teeth.—First upper molar with spaces 4+5 generally though not always open, the other spaces always closed. M^2 with spaces all closed, a small projecting angle on the inner side of its fourth prism, corresponding to the prominent postero-internal angle formed in certain species of the group. M^3 long, complicated, about as in *M. wardi* and *M. chinensis chinensis*, its front end with an *Alticola*-like double space, spaces 1+2 broadly connected; spaces 3+4 also connected; its inner side with four prominent salient angles and one or even two smaller posterior ones; outer side with 4-5 smaller angles. Lower teeth, as usual, with all the spaces open and opposite, m_1 with 4 outer and 5 inner salient angles.

Dimensions of the type (measured in flesh):—

Head and body 101 mm.; tail 46 *; hind foot 17; ear 13.

Skull †: greatest length 25; condylo-incisive length 25; zygomatic breadth 14.5; nasals 7.3 × 3.4; interorbital breadth 4.4; combined height of brain-case and bullæ 8.5; palatilar length 11.6; palatal foramina 5; upper molar series (crowns) 6.1.

Hab. as above.

Type. Old male. B.M. no. 12. 3. 18. 19. Original number 11. Collected 28th May, 1911.

This interesting species shows a certain approximation towards the subgenus *Caryomys*, but its long complicated m^3 with an *Alticola*-like anterior end, with spaces 1+2 open, and its usually open spaces 4+5 of m^1 , indicate that its proper

* Range 35-48.

† Larger than most; another adult skull measures 23.6 mm. in condylo-incisive length.

position is in *Antelionys*, of which it is considerably the smallest species.

There is, however, no doubt that *Eothenomys*, *Antelionys*, and *Caryomys* are all much more closely allied to each other than has hitherto been recognized, and it is really only by the open or closed state of certain of the tooth-spaces and by the simple or complex condition of n^3 that they can be distinguished from each other.

9. *Ochotoma roylei chinensis*, Thos.

♀ (imm.). 25. A-tun-tsi. 16,000'.

A form of Pika only recently discovered at Ta-t sien-lu by Capt. F. M. Bailey.

LVI.—*Description of a new Fish from British East Africa.*
By G. A. BOULENGER, F.R.S.

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Tilapia grahami.

Depth of body 3 to $3\frac{1}{3}$ times in total length, length of head $2\frac{1}{3}$ to $2\frac{2}{3}$ times. Head large, $1\frac{1}{2}$ to $1\frac{2}{3}$ times as long as broad; snout rounded, with convex upper profile, much broader than long, $\frac{3}{4}$ postocular part of head; eye $3\frac{1}{2}$ to $4\frac{1}{2}$ times in length of head, a little greater than præorbital depth; mouth large, $\frac{3}{4}$ width of head, extending to between vertical of nostril and anterior border of eye; lips very strongly developed, the lower forming a very distinct lobe on each side; teeth moderately slender, in 4 series, 30 to 34 in outer series of upper jaw; 3 series of scales on the cheek, width of scaly part nearly equal to diameter of eye. Gill-rakers short, 10 or 11 on lower part of anterior arch. Dorsal XI 11-12; spines feeble, subequal from the third, which measures $\frac{1}{3}$ length of head. Anal III 8-9; spines feeble, like the dorsals. Pectoral $\frac{3}{5}$ to $\frac{2}{3}$ length of head, not reaching origin of anal. Ventral not reaching vent. Caudal rounded. Caudal peduncle as long as deep. Scales cycloid, 28-30 $\frac{3}{11}$; lateral lines $\frac{14-18}{6-11}$; breast and belly naked. Dark blue above, with more or less distinct, ill-defined darker bars; sides with pale blue spots; dirty white beneath; lower labial lobe perfectly